

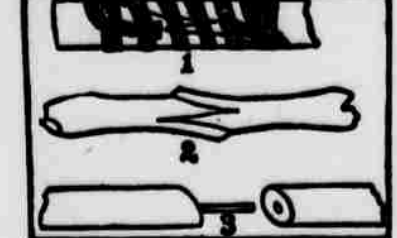
THE FARMING WORLD

SCIENCE OF GRAFTING.

Lessons Taught by Some Experiments with Vines Conducted at the California Station.

Results of experiments in bench grafting resistant vines have recently been reported from the California Experiment station. The experiments include tests of the relative value of English and Champion grafts, leaving two eyes on the scions and leaving only one, preliminary callusing in sand, planting out in the nursery immediately after grafting and callusing in straw covered with sand. The cuttings used varied from one-fourth to one-half inch in diameter, and were from six to nine inches long. The lower cut was made through the knot of the bud and the last internode of the upper left as long as possible. All the buds on the stock were carefully removed, a deep cut being made in order to remove the adventitious buds at the base of the main bud.

Scions were prepared in a similar way, except that the buds were left.



GRAFTS FOR GRAPE CUTTINGS. 1, English cleft; 2, Champion; 3, End to End.

The scions having only one eye were cut through the second knot, in order to leave the eye protected by a closed internode. With the scions having two eyes, the upper cut was made about an inch above the second bud eye. Care was taken to prevent the drying out of the cuttings and afterward of the grafts.

End-to-end grafting, as originated in France, was practiced in some instances. The number of successful grafts obtained by this method was low, but those that did unite made excellent unions. In grafting by this method the ends of stock and scion are cut at an angle of about 70 degrees and held in place by a piece of galvanized wire, which is pushed into the pith of each piece.

The proportion of successful Champion grafts was slightly greater than that of the English cleft. The successful English cleft grafts, however, were considered superior to the other in the matter of completeness and strength of union.

The experiments with two-eye and one-eye scions were, on the whole, in favor of the use of two eyes.

The difference between callusing the grafts in sand and planting them directly in the nursery as soon as made was very striking. Those previously callused produced 61 per cent. of good unions, while the others produced but 26 per cent. There was also a difference in the growth of the grafts in favor of those callused in sand.

GOOD PEACH REGIONS.

Expert Fruit Grower Thinks Suitable Soil Can Be Found in All Parts of the Country.

The past season has been one that has made peach culture more interesting than any other season that I recall in Illinois, from the fact that they have shipped an excellent kind of peaches to market and I suppose made a reasonable amount of money. We used to talk about peach sections; I used to be supposed that it was confined to certain narrow territories, some of them down east, one of them over in Michigan, another in southern Illinois, but the spirit of commercialism has led men to study requirements for successful culture of various kinds of crops, one of them, of course, being the peach, and that study has set men to hunting for suitable locations.

Knowing the requirements, we find there are millions of acres of good peach regions. I have no idea of how much undeveloped first-class peach land there is in the United States, and the transportation companies have made possible the delivery of peaches grown in any section of the United States to any other part of the United States with due dispatch and in good order. That leaves commercial peach growers in a position where it is a question, perhaps in the near future, of a survival of the fittest; a brutal old law, but the survival of the fittest. In the pursuit of the almighty dollar we know no limit to our ambitions. Where acres of peaches were planted a few years ago, whole solid sections are growing to-day. The market, of course, has been developed and extended by the same transportation facilities; the consumption of all fruits seems to be on a rapid increase, although we must doubt as to whether it can keep up with the wonderful increase in the production.—R. Morrill, in Farmers' Review.

Don't Neglect the Garden.

Gardens that pay best are those that receive the most attention. A garden will not take care of itself and yield a profit. Probably no part of the farm pays as large a profit as the garden in good hands. A man that realizes this will give it the first attention in the spring, both as regards labor and fertilizer. The garden lover will not forget it when other parts of the farm also need attention. If a man will not do the work necessary or have it done, he may as well not attempt to have a garden.—Farmers' Review.

Separating Cream from Milk.

If milk is to be used for butter making, keep it as warm as possible and set it to rest for creaming at once, says a Pennsylvania dairyman in New England Homestead. The warmer the milk when set the more complete will be the separation of the cream from the milk at any given lower temperature, and the more rapidly the temperature falls the more rapid will be the separation of the cream from the milk.

POINTS ON CELERY.

The Crop Requires a Deep, Rich and Loose Soil Which Must Be Thoroughly Drained.

The culture of celery has spread over all the United States. Originally it was a mere garden crop, being grown in very small quantities. Now, however, its culture has so extended that it may be considered both a garden and a field crop. It is grown from Maine to Louisiana and from the Atlantic to the Pacific. No less than 26 stations have made experiments with it and reported results in bulletins. Its first culture began near New York in 1853, and Peter Henderson was one of the first growers.

This plant grows wild in England and some parts of Europe. It has generally been supposed that celery was not cultivated till this century, but it is declared to be a mistake. It is declared that its cultivation dates back at least 2,000 years, though it was used only as a medicinal herb principally. Not till the century that just closed did it become a common garden vegetable. The plant has been developed in two ways; in one, the bottom has been enlarged into a turnip-like root. This is eaten by Europeans under the name of celeriac. In the other development the stalk has been rendered large and tender, and this is the form in which we know it in this country.

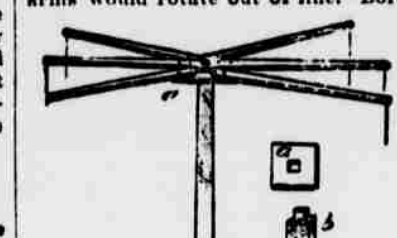
The land largely used for the growing of celery in this country is reclaimed swamp and marsh land. This gives a rich, deep, loose soil, just suited to celery. Such lands can be used only when thoroughly drained. Here it makes a larger growth than on the uplands, but the plant grown on the uplands is frequently of better flavor. The time of seed sowing depends on when the celery is wanted for use. To get an early crop seed can be sown in the house as early as February. The soil is kept moist and the boxes away from sunlight. When the plants begin to appear they should be gradually accustomed to the light. It is better to transplant them once or twice before removing them to the open garden.

The soil must be made rich, if good results are expected. The plant foods most used are nitrogen and potash. When the plants are about ten inches high, the celery that is wanted for fall use should be banded up to blanch it, and this operation should be repeated as the tops grow. The celery intended for winter storing should be earthed sufficiently to induce the stalks to grow upright.—Farmers' Review.

UNIQUE BEAN POLE.

Its Inventor Considers It the Best and Safest Contrivance of the Kind Ever Introduced.

The foundation is of one-inch boards and 12 inches square. The arms are run with the grain to make it as strong as possible; simple strips, 1x1 1/2 inch, will not answer. The arms spread about 3 1/2 feet, which is found sufficient for walking under comfortably. A round hole for a mortise will not do, as the arms would rotate out of line. Bore



DETAILS OF BEAN POLE.

not less than one-half-inch holes for the twine and use coarse wool twine. Set the center post when spading the ground—each one as you come to it, six feet apart, and in clay soil not less than 16 inches deep. Set the stakes for the hills two feet from center on both sides, and two feet apart. A round hole for a mortise will not do, as the arms would rotate out of line. Bore

Covering for Tree Wounds.

Prof. Fred Card's experience is that, taking all things together, nothing seems to be better for covering the wounds made in pruning than common lead paint, which is closely followed by grafting wax. The wax is superior to paint in the matter of healing, but does not last as well, and is not so convenient to apply, although in warm weather, when it works well, it is a little trouble in this regard. Coal tar is useful in preventing the wood from checking, but appears to be a positive hindrance to healing, so that, in spite of the fact that it stays well, there is little to recommend it. Pine tar is no aid to healing, being apparently a slight detriment, while it helps only slightly in the matter of checking, and does not last well, therefore it has nothing to recommend it. Shellac is a failure. It does not last, and neither does the wound in healing any to any appreciable extent prevents it from checking.

Hints on Slipping Plants.

In taking slips from plants for rooting, many persons take off the young branches from the sides and base of the stalk, forcing it to expend all its energies in sending out new growth from the top, and the result is a "straggly" plant. Try taking your slips from the very top of the plant, leaving all sprouts at the base and sides of the old stalk, and you will be surprised to find what nice bushy plants you will have in a short time. Geraniums, coleus, begonias and pelargoniums are benefited by such pruning. Low may be put into a bottle of water and hung behind a picture so that the vines will twine about it, making a pretty decoration while the roots are forming and the little branches are starting out along the stem.—Epitomist.

Starting a Peach Orchard.

Here are the most essential points in starting a peach orchard: If possible start with trees propagated from buds taken from trees of greatest vigor. The most vital point is selection of varieties. If growing for the open market, yellow varieties should be used; also, few sorts. For my locality Eda and Elberta are the best. Do not plant too close—get closer than 16 to 20 feet. Closer planting would be all right if an annual pruning (shortening) was practiced.—W. S. Forrester, in Farmers' Review.

MANAGING THE CALVES.

Valuable Suggestions for Dairywomen Who Are Not Familiar with the Hand-Raising Process.

To one who has had experience in raising calves by hand, the matter seems simple enough, but to the inexperienced a little information may be of use. As a matter of fact, it is not out of place, as mistakes are liable to be made that lead to serious results. It is really better for the calf if it is allowed to remain three days, or even a week, with its mother, as it gets a better start that way, although this may cause a little more trouble in teaching it to drink. At first, new milk must be given, and fed direct from the cow, if possible; if not, warm the milk before feeding, as it must never be given cold. Be gentle in handling the calf. Hold its head down to the milk pail, place hand in milk and insert the finger in calf's mouth until it gets a taste of the milk, and in a day or two will learn to drink without assistance. Feed all the milk that can be spared, and make the change from new milk to skimmed milk gradually. A spoonful of oil meal added to the milk is beneficial, and if any symptoms of scours occur, a spoonful of flour, or an egg mixed in the milk, may be given. In feeding skimmed milk it is well to add a pinch of soda frequently, to prevent indigestion. Dry meal or bran may be fed. In a few weeks give the calf good clean hay, or even straw, but corn fodder is better when one has it. Oats and corn either ground or whole may be fed night and morning. At about four months of age water may be substituted for milk. If it refuses to drink water when it is offered, leave the water in the pen or yard, and when it becomes thirsty the calf will drink.—Ella L. Layson, in Epitomist.

A PAIL TAIL HOLDER.

Of Immense Help to Beginners as Well as to Women and Old and Infirm Persons.

A milking harness, as portrayed, is of great help to the beginner, to an old, infirm or weak person. It consists of an iron band (a) made circular so the milk pail will fit into it. On opposite sides bands are riveted so the circular band will turn freely. The two bands are bent, as shown, one end fastened to band a, the others bent to the shape of the milker's leg. With the bands resting on the legs, the pail is set in circular band (a), and all the



MILKING MADE EASY.

weight of the milk comes on the legs above the knees. The tail holder is shown at b. The band is made of spring steel, so that at b it comes together closely and secures the tail as in a vice. The narrower band is then slipped in the similar small band of the band shown above it, on the right of the upper figure. The milker is shown on the left side of the cow, that the device may be more clearly seen.—James Lathrop, in Farm and Home.

THE INFERIOR BULL.

Why Men Intending to Go into the Stock or Dairy Business Should Leave Him Alone.

Now that cattle values are on a higher level and the usefulness of live stock as a conservator of farm fertility is coming to be realized there will be more farmers starting in stock than for many years past, and right here let me warn you, and sound on the purchase of a cheap bull, for it will be the new stock section that breeders will naturally expect to find a market for their low-priced animals, and when they have one that lacks merit to command a good price in a stock country they will send him where there is a demand for seventy-five or hundred-dollar bulls instead of making him into beef, says the Farmer's Guide. Of course, such procedure in the long run is against the best interests of the breeder, but too many are looking only to present profit. It may be argued that a man with only a few cows cannot afford to make a heavy investment in a bull to grade up with. It is a fact he cannot, and the only way out is for a company and purchase a high-class bull of the desired breed. In this way in a few years each man would have a herd of beef cattle that would be of much greater value and bring in far greater profits than he could have had by purchasing and using a cheap bull. And if this custom should become universal there would be a much more rapid improvement in our cattle than would come by means of individuals getting a number of inferior bulls instead of one good one.

Milk Needs Careful Handling.

I am very careful when milking my cows to have them clean as well as to keep my hands and those of my hired men clean, says M. Dickinson, in American Agriculturist. My stables are always in the best of condition. The milk is run from a hand separator directly into the milk cans. Each skimming is kept separate and hauled to the creamery by itself.

The horse with a docked tail comes to an unnatural end.

MRS. J. E. O'DONNELL

Was Sick Eight Years with Female Trouble and Finally Cured by Lydia E. Pinkham's Vegetable Compound.

"DEAR MR. PINKHAM:—I have never in my life given a testimonial before, but I have done so much for you that I feel called upon to give you this unsolicited acknowledgment of



MRS. JENNIE E. O'DONNELL, President of Oakland Women's Relief Club, the wonderful curative value of Lydia E. Pinkham's Vegetable Compound. For eight years I had female trouble, falling of the womb and other complications. During that time I was more or less of an invalid and not much good for anything, until one day I found a book in my hall telling of the cures you could perform. I became interested; I bought a bottle of Lydia E. Pinkham's Vegetable Compound and was helped; I continued its use and in seven months was cured, and since that time I have had perfect health. Thanks, dear Mrs. Pinkham, again, for the health I now enjoy." MRS. JENNIE E. O'DONNELL, 278 East 31st St., Chicago, Ill.—\$5000 forfeit if above testimonial is not genuine.

Women suffering from any form of female ills can be cured by Lydia E. Pinkham's Vegetable Compound. That's sure.

Mrs. Pinkham advises sick women free. Address, Lynn, Mass.

Couldn't Recollect Any Others.

"Couldn't Recollect Any Others," Stephen—But, Uncle John, whom do you mean when you speak of the "best citizens?"

Uncle John—Well, there is myself, for instance, and—and—I presume there are others; but they do not come to mind just at this moment.—Boston Transcript.

From the East.

Master of the Seraglio—Ha, ha, Most Illustrious, I have had the most delicious joke. I told your wives that you were dead and you should have heard them wail.

The Sultan—What a Harem-scram fellow you are, to be sure.—Yellow Book.

A Bee-line.

The eyes of bees are made to see great distances. When absent from their hive they go up in the air till they see their home, and then fly toward it in a straight line and with great speed. The shortest line between two places is sometimes called a "bee-line."—St. Nicholas.

An Unusual Case.

"You'd better draw up an additional count in the indictment against this woman for throwing a brick," said the district attorney.

"Why?" asked his assistant.

"Because she not only threw it at the man, but actually hit him."—North American.

Mixed with the Funeral Formula.

Hawkins—I won't let a church sexton have charge of our wedding.

Miss Bliss—Why?

"When Tompkins married Miss Bronson the notice of the wedding began: 'Suddenly on the 10th inst.'"—Harlem Life.

Lost Her Postscript.

Walker—I had the laugh on my wife to-day.

Ryder—How did it happen?

Walker—She discovered an echo while we were out driving, and it got in the last word.—Chicago News.

An Improvement That Counted.

Goback—Did the landlord make the promised improvements to your house?

Black—Well, most of them. He painted the roof, put new hinges on the gate and raised the rent two dollars.—Yellow Book.

THE MARKETS.

	New York.	Feb.	Mar.
CATTLE—Native Steers	4.25	4.50	4.75
COTTON—Middling	12.50	12.75	13.00
WHEAT—No. 2 Red	1.10	1.12	1.15
CORN—No. 2	.75	.77	.80
PORE—Mess New	15.00	15.25	15.50
COTTON—Middling	12.50	12.75	13.00
BEEF—Cows and Butters	4.25	4.50	4.75
CALVES—Per 100 lbs.	4.25	4.50	4.75
HOGS—Pair to Choice	5.50	5.75	6.00
PORE—Patents	3.50	3.75	4.00
Other Grades	3.15	3.40	3.65
WHEAT—No. 2	.85	.87	.90
CORN—No. 2	.75	.77	.80
Other Grades	.70	.72	.75
WHEAT—Tub-Washed	14.00	14.25	14.50
RYE—No. 2	12.00	12.25	12.50
HAY—Clear Timothy	12.00	12.25	12.50
BUTTER—Choice Dairy	17.00	17.25	17.50
EGGS—Fresh	15.00	15.25	15.50
PORE—Dried, Mess (new)	15.00	15.25	15.50
PORE—Choice Steam	15.00	15.25	15.50
CATTLE—Native Steers	4.25	4.50	4.75
COTTON—Middling	12.50	12.75	13.00
WHEAT—No. 2 Red	1.10	1.12	1.15
CORN—No. 2	.75	.77	.80
PORE—Mess New	15.00	15.25	15.50
COTTON—Middling	12.50	12.75	13.00
BEEF—Cows and Butters	4.25	4.50	4.75
CALVES—Per 100 lbs.	4.25	4.50	4.75
HOGS—Pair to Choice	5.50	5.75	6.00
PORE—Patents	3.50	3.75	4.00
Other Grades	3.15	3.40	3.65
WHEAT—No. 2	.85	.87	.90
CORN—No. 2	.75	.77	.80
Other Grades	.70	.72	.75
WHEAT—Tub-Washed	14.00	14.25	14.50
RYE—No. 2	12.00	12.25	12.50
HAY—Clear Timothy	12.00	12.25	12.50
BUTTER—Choice Dairy	17.00	17.25	17.50
EGGS—Fresh	15.00	15.25	15.50
PORE—Dried, Mess (new)	15.00	15.25	15.50
PORE—Choice Steam	15.00	15.25	15.50

A WESTERN CANADA FARMER.

Seven Years Ago He Had But \$24; Now He Has Seventy Head of Cattle.

This is What a Couple of Eastern Farmers Learned When on a Recent Trip to Canada—Splendid Words About Saskatchewan, Southern and Prairie Provinces, and Where They Will Locate.

Messrs. J. E. Blum and J. Grumper, of Manchester, Washenaw Co., Michigan, paid a visit to Alberta last summer and saw there a Mr. Shantz, one of the good old Pennsylvania stock, who had come recently—some seven years ago—from Ontario, with \$24 in his pocket. He has certainly prospered as he now owns over 70 head of cattle, has a good log house framed over, also a good barn and in all respects looks a thrifty and well-to-do farmer. He had some good crops of oats and barley. After spending some days in Calgary and Edmonton they returned to Regina, Assiniboia, and looked around the country North to Lumsden and Balgonie where the crops appeared very promising and heavy, continuing up the Regina and Long Lake Road they came to Saskatoon on the crossing of the South Saskatchewan River. Of this district they say:—

"The country here pleased us better than any we have seen. We drove over eighteen miles in northwesterly direction through the Smith settlement. This is a wonderful district, the growth was splendid, all kinds of grains and roots were perfect. The older settlers had good buildings of all kinds and looked very prosperous. In fact we came to the conclusion that we had found what we were looking for, a good country. While the nature of the soil changes and is in some parts light, in others stony, and again heavy, generally speaking it leaves nothing to be desired. Hay and water are also in abundance and wood can be found along the river slopes and islands. We have decided to locate there and shall certainly advise our friends to do likewise. We also trust that this report may have the effect of drawing the attention of land seekers to this district, and can honestly advise all such to locate there. They will find a good thing. As farmers ourselves, from a good district in Michigan, we have come to the conclusion that properly farmed Western Canada will grow almost anything." Ask for information from any agent of the Canadian government.

A MIXED LOT.

For a sore throat use a gargle of alum and water; it will often effect a cure.

Tomatoes rouse a torpid liver and do the work, occasionally, of a doctor's prescription.

The gold fields of western Australia are the largest in the world. They cover 324,000 square miles.

Rats have been pestering the Mount Kosciusko observatory in the Australian Alps. Rats for above sea level.

The officials are killing hundreds of them every month.

French Africa is reckoned at over 3,504,000 square miles, as against 2,733,000 miles under English control. Adding, however, the million square miles of Egypt, the English possessions equal those of France.

A new airship has been manufactured for M. Santos-Dumont, who expects to travel at the rate of 60 miles an hour in it. The new airship is considerably larger than its six predecessors, the famous aerostat has owned.

Wholesale expositions are planned for Tory Island, nine miles off the Donegal shore. The population of 300 lives by fishing and making kelp and has paid neither rent nor taxes for years. The landlord's writs of ejectment will be backed up by a British warship.

Feed for Ewes.

Cottonseed meal should be carefully excluded from the food rations of ewes from this time on while carrying a lamb. The root of the cotton plant has an especially ill effect on pregnant animals of all kinds, and is the especial ingredient in medicines given to avoid or destroy pregnancy. As a rule every part of a medicinal plant has a similar character to the root or the fruit, hence this kind of oil meal should never be fed to breeding animals at such times, as this ill influence might be disastrous. Corn is the best standard food for lambs and ewes, and it is not in any way injurious. Ewes carrying lambs are in no danger from a good, robust, thrifty condition, for the lamb is all the time acquiring its future character from its dam.—American Sheep Breeder.

ANOTHER MAN ALTOGETHER.

Valley, Mo., Feb. 24th.—There is a man in this town who has undergone a most remarkable physical change in the last few months.

His name is Perry Nelson and those who knew him but a short time ago are amazed at his present condition.

He had not been feeling well for some time and suspecting that the trouble came from his kidneys, which he knew were not any strong, he determined to try a kidney medicine.

Dodd's Kidney Pills were highly recommended and Mr. Nelson began a treatment of them. He was rewarded by a complete restoration to vigorous good health. He says:

"I used six boxes of Dodd's Kidney Pills, and they have helped me a great deal. I feel like another man and can recommend Dodd's Kidney Pills very highly."

Probably.

Only twenty inches of sitting space is to be allotted to each person at the coronation. Dear, dear, think of the tired and nervous old ladies who are living monuments to the tissue building properties of Foster's and rare old ale!

As the man remarked when he saw the policeman running: "Somebody is going to get pinched."—Cleveland Plain Dealer.

There is no trick in drying. You can do it just as well as anyone if you use PUTNAM FADELESS DYES. Boiling the goods for half an hour is all there is to it. Sold by druggists, 10c package.

Returned the Compliment. Dusty—When I came into the yard the bulldog showed his teeth. Whiggles—And what did you do? Dusty—The proper thing; I showed him my heels.—Boston Transcript.

Pink's Cure is the best medicine we ever used for all affections of the throat and lungs.—Wm. O. Endrey, Vanburn, Ind. Feb. 10, 1906.

About all you can do with people who hate you is to conclude they have had taste.—Athensian Gazette.

To Cure a Cold in One Day Take James Watson's Quick Tablets. All Joints and muscles money if it fails to cure you.

Fifty years ago Henrik Ibsen was a clerk in a drug store.

St. Jacobs Oil

PECULIAR TO ITSELF.

There is no other remedy like St. Jacobs Oil. The vegetable is made consist in part of healing, soothing, and fragrant balsams—gathered with the greatest care from the different parts of the world by trusted agents—the active principles of which are to kill pain, cure Rheumatism, and remove all bodily aches and pains. It penetrates to the very foundation of the difficult cause of pain. No other remedy does this so thoroughly and effectively as St. Jacobs Oil. It has cured hundreds of cases where pain had held the body in torture for years, after every other form of treatment had failed.

ACTS LIKE MAGIC.

Conquers Pain

Take James Watson's Quick Tablets. All Joints and muscles money if it fails to cure you.

Fifty years ago Henrik Ibsen was a clerk in a drug store.

CASTORIA

For Infants and Children

Bears The Signature Of *Chas. H. Fletcher* Use For Over Thirty Years The Kind You Have Always Bought

THE CENTURY COMPANY, 29 MURRAY STREET, NEW YORK CITY.

SALZER'S SEEDS

BROMUS INERMIS

The greatest grain of the century. We are the inventors and the only growers of this grain in America. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name.

SPELTZ

The great grain of the century. We are the inventors and the only growers of this grain in America. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name.

TRIPLE INCOME CORN

The great grain of the century. We are the inventors and the only growers of this grain in America. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name.

Colder Plants, Grasses and Clover

We have the largest and best seed stock in America. We are the inventors and the only growers of this grain in America. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name. It is a new and improved variety of the old variety of the same name.

VEGETABLE SEEDS

We have the largest and best seed stock in America. We are the inventors and the only growers of this grain in America. It is a new and improved variety of the old variety